



PTO/SB/21 (09-04)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/605,319
Filing Date	September 22, 2003
First Named Inventor	David G. GRIER
Art Unit	2872
Examiner Name	Arnel C. Lavarias
Attorney Docket Number	71480.00011

ENCLOSURES (Check all that apply)

- | | | |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance Communication to TC |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment/Reply | <input type="checkbox"/> Petition | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Terminal Disclaimer | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Request for Refund | PTO/SB/08A, 2 pgs. |
| <input checked="" type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> CD, Number of CD(s) _____ | PTO/SB/08B, 5 pgs. |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> Landscape Table on CD | 17 references |
| <input type="checkbox"/> Reply to Missing Parts/Incomplete Application | Remarks | |
| <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Dickinson Wright, PLLC		
Signature	<i>Jean C. Edwards</i>		
Printed name	Jean C. Edwards, Esq.		
Date	December 15, 2004	Reg. No.	41,728

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

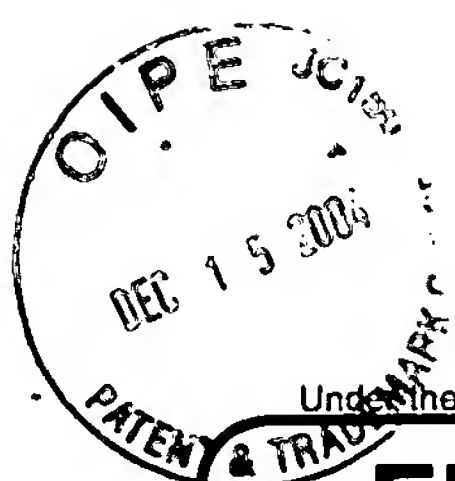
Signature

Typed or printed name

Date

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PTO/SB/17 (10-04v2)

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FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$ 180.00)

Complete if Known

Application Number	10/605,319
Filing Date	September 22, 2003
First Named Inventor	David G. GRIER
Examiner Name	Arnel C. Lavarias
Art Unit	2872
Attorney Docket No.	71480.00011

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit Account Number
Deposit Account Name

04-1061

Dickinson Wright PLLC

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	790	2001	395	Utility filing fee	
1002	350	2002	175	Design filing fee	
1003	550	2003	275	Plant filing fee	
1004	790	2004	395	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid
Total Claims		-20** =		X		
Independent Claims		-3** =		X		
Multiple Dependent						

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	88	2201	44	Independent claims in excess of 3
1203	300	2203	150	Multiple dependent claim, if not paid
1204	88	2204	44	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity | Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	430	2252	215	Extension for reply within second month	
1253	980	2253	490	Extension for reply within third month	
1254	1,530	2254	765	Extension for reply within fourth month	
1255	2,080	2255	1,040	Extension for reply within fifth month	
1401	340	2401	170	Notice of Appeal	
1402	340	2402	170	Filing a brief in support of an appeal	
1403	300	2403	150	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,370	2453	685	Petition to revive - unintentional	
1501	1,370	2501	685	Utility issue fee (or reissue)	
1502	490	2502	245	Design issue fee	
1503	660	2503	330	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	180.00
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$ 180.00)

SUBMITTED BY

(Complete (if applicable))

Name (Print/Type)	Jean C. Edwards	Registration No. (Attorney/Agent)	41,728	Telephone	202/659-6946
Signature	Jean C. Edwards	Date	December 15, 2004		

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

David G. GRIER et al.

Group Art Unit: 2872

Application No.: 10/605,319

Examiner: Arnel C. Lavarias

Filed: September 22, 2003

Confirmation No.: 2318

For: APPARATUS FOR APPLYING OPTICAL GRADIENT FORCES

INFORMATION DISCLOSURE STATEMENT

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the PTO/SB/08A and PTO/SB/08B. It is respectfully requested that the information be considered during the prosecution of this application, and that the references be made of record and appear among the "References Cited" on any issued patent.

The information contained on PTO/SB/08A, pages 1 and 2, and on PTO/SB/08B, pages 3 and 4, was cited in a communication from the European Patent Office in a counterpart foreign application related to parent application, U.S. Patent No. 6,055,106, issued April 25, 2000.

The references listed on the enclosed PTO/SB/08B forms, pages 5-7, were previously identified in parent applications US Patent No. 6,624,940, issued September 23 2003, and U.S. Patent No. 6,055,106, issued April 25, 2000, and copies of the references were furnished therein. Additional copies of the references on forms PTO/SB/08B, pages 5-7, are not submitted herewith, so as not to burden the file with duplicate copies of references.

English-language Abstracts of the non-English language references are attached hereto.

This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.

Attached is a check in the amount of \$180 in payment of the fee under 37 CFR §1.17(p). Please credit or debit Deposit Account No. 04-1061 as needed to ensure consideration of the disclosed information.

Respectfully submitted,

Jean C. Edwards

Jean C. Edwards
Registration No. 41,728

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Telephone: 202/659-6946
Facsimile: 202/659-1559

Date: December 15, 2004



PTO/SB/08A (08-03)

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 7

Complete if Known

Application Number	10/605,319
Filing Date	September 22, 2003
First Named Inventor	David G. GRIER
Art Unit	2872
Examiner Name	Arnel C. Lavarias
Attorney Docket Number	71480.00011

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 5,452,123	09-1995	Asher et al.	
		US- 5,445,011	08-1995	Ghislain et al.	
		US- 5,374,556	12-1994	Bennett et al.	
		US- 5,364,744	11-1994	Buican et al.	
		US- 5,355,252	10-1994	Haraguchi	
		US- 5,343,038	08-1994	Nishiwaki et al.	
		US- 5,245,466	09-1993	Burns et al.	
		US- 5,079,169	01-1992	Chu et al.	
		US- 5,029,791	07-1991	Ceccon et al.	
		US- 4,827,125	05-1989	Goldstein	
		US- 4,627,689	12-1986	Asher	
		US- 3,808,432	04-1974	Ashin	
		US- 3,793,541	02-1974	Ashkin et al.	
		US- 3,710,279	01-1973	Ashkin	
		US- 5,327,515	07-1994	Anderson et al.	
		US- 5,113,286	05-1992	Morrison	
		US- 5,473,471	12-1995	Yamagata et al.	
		US- 5,629,802	05-1997	Clark	
		US- 4,127,329	11-1978	Chang et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		JP 5-88107	04-1993	Ogasawara	Abstract	
		JP 9-89780	04-1997	Ysuda et al.	Abstract	

Examiner
SignatureDate
Considered

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**INFORMATION DISCLOSURE
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(Use as many sheets as necessary)

Sheet 2

of 7

Complete if Known

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Examiner Name	Arnel C. Lavarias
Attorney Docket Number	71480.00011

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		Number-Kind Code ² (if known)			
		US- 5,198,369	03-1993	Itoh et al.	
		US- 5,776,674	07-1998	Ulmer	
		US- 5,935,507	08-1999	Morito et al.	
		US- 6,076,732	06-2000	Lan et al.	
		US- 5,574,597	11-1996	Kataoka	
		US- 5,798,784	08-1998	Nonaka et al.	
		US- 5,953,166	09-1999	Shikano	
		US- 5,939,716	08-1999	Neal	
		US- 5,952,651	09-1999	Morito et al.	
		US- 5,689,109	11-1997	Raimund	
		US- 5,512,745	04-1996	Jeffrey et al.	
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FOREIGN PATENT DOCUMENTS

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		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
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		Art Unit	2872
		Examiner Name	Arnel C. Lavarias
Sheet 3	of 7	Attorney Docket Number	71480.00011

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Patent Abstracts of Japan Vol. 1996, No. 9, 30 September 1996 & JP 08-131820A (Moritetsukusu:KK), 28 May 1996 *abstract*	
		WO 91 19413 A (Res Corp Technologies Inc.) 12 December 1991, page 18, paragraphs 2,3	
		N.R. heckengberg et al., Opt & Quant. Elect., vol. 24, S951 (1992)	
		H He, NR Heckenberg, and H Rubinsztein-Dunlop, J Mod Optics 42, 217-223 (1995)	
		H He, MEJ Friese, NR Heckenberg, and H Rubinsztein-Dunlop, Phys Rev Let 75 826-829 (1995)(and references therein)	
		MEJ Friese, J Enger, H Runbinsztein-Dunlop and NR Heckenberg, Phys Rev A 54 1593-1596 (1996)	
		KT Gahagan and GA Swartlander, Optics Letters 21 827-829 (1996)	
		KT Gahagan and GA Swartlander, J Opt Soc Am B-15 524-534 (1998)	
		D'Henlon et al., J Modern Optics 595-601 (1994)	
		H. Dammann and K. Gortler, Optics Comm. 3 312-318 (1971)	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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		Art Unit	2872
		Examiner Name	Arnel C. Lavarias
Sheet 4	of 7	Attorney Docket Number	71480.00011

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		M.P. Dames, R.J. Dowling, P. McKee and D. Wood, 30 2685 (1991)	
		SE Broomfield et al., Electronics Letters 28, 26-28 (1992)	
		J Gourlay, S. Samus et al., Applied Optics 33, 8251-8254 (1994)	
		H. Misawa et al., "Multibeam Laser Manipulation and Fixation of Microparticles", Appl. Phys. Lett., Vol. 60, No. 3, pp. 310-312, January 20, 1992	
		Mogensen et al., "Dynamic Array Generation and Pattern Formation for Optical Tweezers", Feb. 25, 2000, Optics Comm., pp. 75-81	

Examiner Signature		Date Considered	
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet 5 of 7	Attorney Docket Number	71480.00011	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		D.G. Grier, "Description of Optical Tweezer Arrays and Optical Substrates Created with Diffractive Optical Elements", pp. 1-6, Dec. 22, 1997.	
		E.R. Dufresne and D.G. Grier, "Optical Tweezer Arrays and Optical Substrates Created with Diffractive Optics", pp. 1-6, Nov. 12, 1997.	
		J.H. Holtz and S.A. Asher, "Polymerized Colloidal Crystal Hydrogel Films as Intelligent Chemical Sensing Materials", Nature, Vol. 389, pp. 829-832, Oct. 23, 1997.	
		E.R. Dufresne and D.G. Grier, "Embraced by the Light: Diffractive Optical Substrates and the Hexadeca Tweezer", pp. 1-4, Oct. 22, 1997.	
		D.G. Grier, "New Age Crystals", pp. 1-2, Oct. 14, 1997.	
		A. Ashkin, "Optical Trapping and Manipulation of Neutral Particles Using Lasers", Proc Natl. Acad. Sci. USA, Vol. 94, 00. 4853-4860, May 1997.	
		E. Fallman and O. Axner, "Design for Fully Steerable Dual-Trap Optical Tweezers", Applied Optics, Vol. 36, No. 10, pp. 2107-2113, Apr. 1, 1997.	
		A. van Blaaderen, R. Ruel, P. Wiltzius, "Template-Directed Colloidal Crystallization", Nature, Vol. 385, pp. 321-324, Jan. 23, 1997.	
		Visscher, et al. "Construction of Multiple-Beam Optical Traps with Nanometer-Resolution...", IEEE Jnl. of Sel. Topics in Quantum Elec., Vol 2, No 4, pp 1066-1075, Dec 1996.	
		A. Suzuki, T. Ishii, Y. Maruyama, "Optical Switching in Polymer Gels", J. Appl. Phys. 80(1), pp. 131-136, July 1, 1996.	

Examiner Signature		Date Considered	
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		Application Number	10/605,319
		Filing Date	September 22, 2003
		First Named Inventor	David G. GRIER
		Art Unit	2872
		Examiner Name	Arnel C. Lavarias
Sheet 6	of 7	Attorney Docket Number	71480.00011

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Xiang et al., "A Combinatorial Approach to Materials Discovery", Science, Vol. 268, pp. 1738-1740, June 23, 1995.	
		C. A. Murray and D. G. Grier, "Colloidal Crystals", American Scientist, Vol. 83, pp. 238-245, May-June 1995.	
		Mason and Weitz, "Optical Measurements of Frequency-Dependent Linear Viscoelastic Moduli of Complex Fluids", Phys. Rev. Letters, Vol. 74, No. 7, pp. 1250-1253, Feb. 13, 1995.	
		Crocker and Grier, "Microscopic Measurement of the Pair Interaction Potential of Charge-Stabilized Colloid", Phys. Rev. Letters, Vol. 73, No. 2, pp. 352-355, July 11, 1994.	
		K. Sasaki et al., "Optical Micromanipulation of a Lasing Polymer Particle in Water", Jpn. J. Appl. Phys., Vol. 32, Part 2, No. 8B, pp. L 1144-L 1147, Aug. 15, 1993.	
		R. S. Afzal and E. B. Treacy, "Optical Tweezers Using a Diode Laster", Rev. Sci. Instrum. 63(4), pp. 2157-2163, April 1992.	
		A. Ashkin, "Forces of a Single-Beam Gradient Laser Trap on a Dielectric Sphere in the Ray Optics Regime", Biophysical Journal, Vol. 61, pp. 569-582, Feb. 1992.	
		K. Sasaki et al., "Pattern Formation and Flow Control of Fine Particles by Laser-Scanning Micromanipulation", Optics Letters, Vol. 16, No. 19, pp. 1463-1465, Oct. 1, 1991.	
		K. Sasaki et al., "Laser-Scanning Micromanipulation and Spatial Patterning of Fine Particles", Japanese Journal of Applied Physics, Vol. 31, No. 5B, pp. L 907-L 909, May 1991.	
		H. Misawa et al., "Spatial Pattern Formation, Size Selection, and Directional Flow of Polymer Latex Particles by Laser Trapping Technique", Chemistry Letters, 469-472, 1991.	

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Sheet 7	of 7	Attorney Docket Number	71480.00011

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		M. M. Burns et al., "Optical Matter: Crystallization and Binding in Intense Optical Fields", Science, Vol. 249, pp. 749-754, Aug. 17, 1990.	
		M. M. Burns et al., "Optical Binding", Physical Review Letters, Vol. 63, No. 12, pp. 1233-1236, Sept. 18, 1989.	
		A. Ashkin et al., "Optical Trapping and Manipulation of Single Cells Using Infrared Laser Beams", Nature, Vol. 330, pp. 769-771, Dec. 24/31, 1987.	
		A. Ashkin et al., "Observation of a Single-Beam Gradient Force Optical Trap for Dielectric Particles", Optics Letters, Vol. 11, No. 5, pp. 288-290, May 1986.	
		A. Chowdhury, B. J. Ackerson, N. Clark, "Laser-Induced Freezing", Physical Review Letters, Vol. 55, No. 8, pp. 833-836, Aug. 19, 1985.	
		Fournier et al., "Writing Diffractive Structures by Optical Trapping", SPIE Vol. 2406, pp. 101-111.	
		Cell Robotics LaserTweezers 1000 Series, by Cell Robotics Inc.	
		Chiou, Arthur E. et al., "Interferometric optical tweezers," Optics Comm., 01 January 1997, Vol. 122, pp. 7-10	

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